OBS Studio

OBS Studio (also **Open Broadcaster Software** or **OBS**, for short)[7] is a free and open-source, cross-platform screencasting and live streaming app. It is available for Windows, macOS, Linux distributions, and BSD. The OBS Project raises funds on Open Collective and Patreon.[8][9]

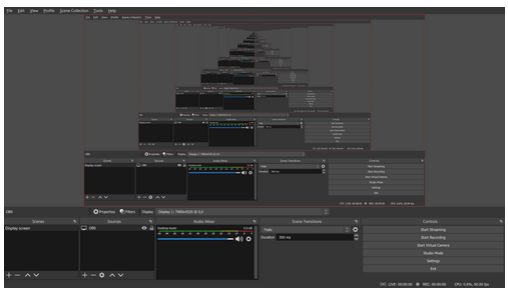
Overview

OBS Studio is a free and open-source app for screencasting and live streaming. Written in C/C++ and built with Qt, OBS Studio provides real-time capture, scene composition, recording, encoding, and broadcasting via Real-Time Messaging Protocol (RTMP), HLS, SRT, RIST or WebRTC. It can stream videos to any RTMP-supporting destination, including YouTube, Twitch, Instagram and Facebook.[10]

For video encoding, OBS Studio can use the x264, AOM-AV1, SVT-AV1 transcoder,[11] Intel Quick Sync Video, Nvidia NVENC, AMD Video Coding Engine and VAAPI to encode video streams into the H.264/MPEG-4 AVC or H.265/HEVC formats.[12] It can encode multiple tracks of audio in AAC and Opus format. More experienced users can choose any codecs and containers available in libavcodec and libavformat, or output the stream to a custom FFmpeg URL.[13]

OBS Studio also supports plug-ins to extend its functionality.[14]

User interface



OBS 26.1.0

The main user interface is organized into five sections: scenes, sources, audio mixer, transitions, and controls. Scenes are groups of sources like live and recorded video, text and audio. The mixer panel lets the user mute the audio, and adjust the volume through virtual faders, and apply effects by pressing the cogwheel next to the mute button. The control panel has options for starting/stopping a stream or recording, a button to transform OBS to a more professional Studio Mode (see below), a button for opening the settings menu and a button to exit the program. The upper section has a live video preview, used to monitor and edit the current scene. The user interface can be switched to a variety of themes, including both dark and light themes,

depending on what the user prefers. The layout of the interface can further be customized by undocking or adjusting the size and location of each panel.

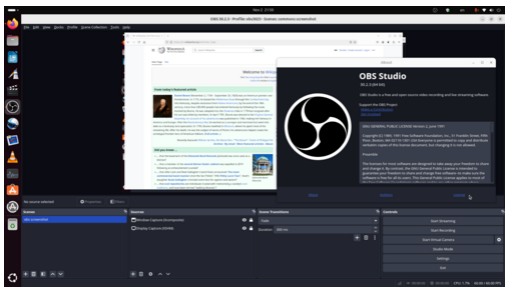
When in Studio Mode, there are two canvas preview windows, the left one for modifying and preview of non-active scenes, while the right window is for preview of the live scene ("Preview" and "Program" respectively). In the middle there is a secondary transition button, allowing for transitioning to the non-active scene in the left window using user-defined "quick transitions".

History

OBS Studio started out as a small project created by Lain Bailey, but quickly grew with the help of many online collaborators working both to improve OBS and to share knowledge about the program. The first version was released in August 2012.[15] In 2013, development started on a rewritten version known as OBS Multiplatform (later renamed OBS Studio) for multi-platform support, a more thorough feature set, and a more powerful API.[16] In 2016, OBS "Classic" lost support and OBS Studio became the primary version.[17] In March 2022, OBS was released on Steam for both Windows and Mac.[18]

On 16 December 2021, an OBS Studio developer drew attention to an invitation-only release of TikTok Live Studio, which appeared to be based on OBS Studio, without acknowledgement and in violation of OBS Studio's license.[19][20]

OBS Studio



OBS Studio running on Ubuntu

Original author(s)	Lain Bailey
Initial release	v0.32a / 1 September 2012[1]
Stable release	31.0.3 / March 28, 2025
Repository	github.com/obsproject/obs-studio (https://github.com/obsproject/obs-studio)
Written in	C, C++[2]
Operating system	Windows 10 or later, macOS Big Sur (11) or later, Linux (Ubuntu 20.04 or later), BSD[3][4]
Platform	x86-64 and Apple silicon
Available in	59 languages[5]
List of languages	[show]

Type	Software vision mixer, streaming media
License	GPL-2.0-or-later[6]
Website	obsproject.com (https://obsproject.com)

See also

Free and open-source software portal

- Comparison of screencasting software
- List of free and open-source software packages

References

1. "Open Broadcaster Software – Changelog" (https://web.archive.org/web/20130517140730/http://obsproject.com/changelog.txt) . The OBS Project. Archived from the original (https://obsproject.com/changelog.txt) on 17 May 2013. Retrieved 13 October 2020.
2. "OBS" (https://github.com/obsproject/obs-studio) . The OBS Project. Retrieved 15 January 2022.
3. "Open Broadcaster Software | OBS" (https://obsproject.com/) . The OBS Project. Retrieved 13 October 2020.
4. "Obs-studio Download (APK, DEB, EOPKG, RPM, TGZ, TXZ, ZST)" (https://pkgs.org/download/obs-studio) . *pkgs.org*. Retrieved 10 August 2021.
5. "Locales" (https://github.com/obsproject/obs-studio/blob/master/UI/data/locale.ini) . The OBS Project. Retrieved 13 October 2020.
6. "COPYING" (https://github.com/obsproject/obs-studio/blob/master/COPYING) . *obsproject/obs-studio*. Retrieved 13 October 2020 – via GitHub.
7. "OBS Classic is no longer supported – Here's how to easily switch to OBS Studio" (https://obsproject.com/forum/threads/obs-classic-is-no-longer-supported-heres-how-to-easily-switch-to-obs-studio.55820/) . The OBS Project. 11 October 2016. Retrieved 26 March 2020.
8. "Open Broadcaster Software – Open Collective" (https://opencollective.com/obsproject) . *opencollective.com*. Retrieved 23 March 2021.
9. "Hugh Bailey ("Jim") is creating the OBS Project" (https://www.patreon.com/obsproject) . *Patreon*. Retrieved 23 March 2021.
10. Wilde, Tyler (4 December 2012). "How to stream games with Open Broadcaster: a fast, free livestreaming application – News – PC Gamer" (http://www.pcgamer.com/2012/12/04/how-to-set-up-open-broadcaster-a-free-lightweight-livestreaming-application/) . *PC Gamer*. Future Publishing Limited. Retrieved 2 June 2013.

11. "x264 Home Page" (http://www.videolan.org/developers/x264.html) . VideoLan Organization. Retrieved 11 March 2011. "In addition to being free to use under the GNU GPL, x264 is also available under a commercial license from x264 LLC and CoreCodec."
12. "General Performance And Encoding Issues" (https://obsproject.com/wiki/General-Performance-and-Encoding-Issues) . *obsproject.com*.
13. "Surround Sound Streaming And Recording | OBS" (https://obsproject.com/wiki/Surround-Sound-Streaming-And-Recording) . *obsproject.com*.
14. "Plugins – OBS Studio 24.0.0 documentation" (https://obsproject.com/docs/plugins.html) . *obsproject.com*.
15. Bailey, Hugh (31 August 2012). "I made a streaming application so I could stream startcraft. Now it's open source and free for everyone" (https://www.reddit.com/r/starcraft/comments/z58e9/i_made_a_streaming_application_so_i_could_stream/) . *Reddit*. Retrieved 10 May 2021.
16. "obs-studio/README (first commit)" (https://github.com/obsproject/obs-studio/blob/f255ae1922e1c1d07ef03a920f7ce5d4476ea6aa/README) . *GitHub*. Retrieved 19 November 2021.
17. "OBS Classic is no longer supported – Here's how to easily switch to OBS Studio" (https://obsproject.com/forum/threads/obs-classic-is-no-longer-supported-heres-how-to-easily-switch-to-obs-studio.55820/) . The OBS Project. 11 October 2016. Retrieved 30 April 2017.
18. "OBS Studio – Steam News Hub" (https://store.steampowered.com/news/app/1905180?emclan=103582791471667062&emgid=3091164432526320493) . *store.steampowered.com*. Retrieved 20 September 2022.
19. Roth, Emma (20 December 2021). "TikTok's new Live Studio app allegedly violates OBS' licensing policy" (https://www.theverge.com/2021/12/20/22847213/tiktoks-live-studio-obs-open-source-policy) . *The Verge*. Retrieved 14 March 2022.
20. Roettgers, Janko (20 December 2021). "TikTok is accused of violating GPL with new livestreaming software" (https://web.archive.org/web/20211221000047/https://www.protocol.com/bulletins/tiktok-obs-gpl-violation) . *Protocol*. Archived from the original (https://www.protocol.com/bulletins/tiktok-obs-gpl-violation) on 21 December 2021. Retrieved 14 March 2022.

External links

- Official website (https://obsproject.com/)
- obs-studio (https://github.com/obsproject/obs-studio) on GitHub